

CLAIMS

1-26. (Cancelled).

27. (Currently amended) A wireless local area network system comprising:

an access point configured to associate with and communicate data packets to one or more mobile units using a wireless data communication standard protocol, wherein the data packets each include a mobile unit destination address, the access point further configured to perform an association process with the one or more mobile units such that the access point becomes the unique associated access point for communicating the data packets to the one or more mobile units associated therewith; and

a switching hub connected to the access point via a wired network connection, wherein the switching hub includes a routing list correlating the mobile unit destination addresses of each of the mobile units to their associated access points, and is configured to selectively route the data packets to the access point if the mobile unit destination address of the packet corresponds to one of the access point's associated mobile units, such that the access point acts as a conduit between the switching hub and the mobile units without monitoring the mobile unit destination address within the data packets.

28. (Previously presented) The wireless local area network system of claim 27, wherein the access point is connected to the switching hub via an Ethernet connection.

29. (Withdrawn) The wireless local area network system of claim 28, wherein the access point receives electrical power via the Ethernet connection.

30. (Withdrawn) The wireless local area network system of claim 29, wherein the switching hub includes DC power supply coupled to a cable providing the Ethernet connection.

31. (Withdrawn) The wireless local area network system of claim 30, wherein the cable includes a first pair of the wire pairs coupled to the DC power supply, and a second pair of wire pairs for communicating the data packets to the access point.

32. (Withdrawn) The wireless local area network system of claim 31, further including a choke circuit coupled between the DC power supply and the access point.

33. (Previously presented) The wireless local area network system of claim 27, wherein the access point includes a connector jack configured to be directly received by a socket provided in a surface, wherein the socket is communicatively coupled to the switching hub, and wherein the connector jack provides structural support for the access point with respect to the surface.

34. (Previously presented) The wireless local area network system of claim 27, wherein the access point is further configured to prevent the relaying of predetermined types of data packets.

35. (Previously presented) The wireless local area network system of claim 34, wherein the predetermined types of data packets includes router broadcast messages.

36. (Previously presented) The wireless local area network system of claim 27, wherein the switching hub is configured to interface with a wired local area network.

37. (Previously presented) The wireless local area network system of claim 27, wherein the routing list is populated at the time that the mobile units are associated with the access point.

38. (Previously presented) The wireless local area network system of claim 27, wherein the wireless data communication standard protocol is an IEEE 802.11 protocol.